What is claimed is:

1. A thin film piezoelectric element comprising:

a pair of piezoelectric element units including a first piezoelectric element unit and a second piezoelectric element unit;

wherein said first piezoelectric element unit includes a first structure, and said second piezoelectric element unit includes a second structure;

wherein each of said first and second structures comprises a first piezoelectric thin film enclosed between a first principal electrode film and a first counter electrode film, and a second piezoelectric thin film enclosed between a second principal electrode film and a second counter electrode film, said first counter electrode film and said second counter electrode film being bonded together so as to face each other via an adhesive layer;

wherein said first structure and said second structure are disposed on substantially a same plane;

wherein said first and second structures are generally separate from each other but are coupled together at a bonding-region, said first and second counter electrode films of said first structure being coupled to said first and second counter electrode films of said second structure, respectively, at said bonding-region;

wherein said first piezoelectric element unit includes a

wiring connection part connecting said first principal electrode film of said first structure with said second principal electrode film of said first structure, and said second piezoelectric element unit includes a wiring connection part connecting said first principal electrode film of said second structure with said second principal electrode film of said second structure.

2. The thin film piezoelectric element of claim 1, wherein

at said bonding-region, said first counter electrode film of said first structure is integrally formed with said first counter electrode film of said second structure; and

at said bonding region, said second counter electrode film of said first structure is integrally formed with said second counter electrode film of said second structure.

3. The thin film piezoelectric element of claim 1, wherein

said first piezoelectric thin film of said first structure is coupled with said first piezoelectric thin film of said second structure at said bonding-region; and

said second piezoelectric thin film of said first structure is coupled with said second piezoelectric thin film of said second structure at said bonding-region.

4. The thin film piezoelectric element of claim 1, wherein

said first piezoelectric thin film of said first structure

is integrally formed with said first piezoelectric thin film of said second structure at said bonding-region; and

said second piezoelectric thin film of said first structure is integrally formed with said second piezoelectric thin film of said second structure at said bonding-region.

5. The thin film piezoelectric element of claim 1, wherein

an external connection terminal of said first piezoelectric element unit is provided on one of said first principal electrode film and said second principal electrode film of said first structure; and

an external connection terminal of said second piezoelectric element unit is provided on one of said first principal electrode film and said second principal electrode film of said second structure.

6. The thin film piezoelectric element of claim 1, wherein

said wiring connection parts of said first and second piezoelectric element units, respectively, are formed adjacent leading ends or rear edges of said first and second structures, respectively.

7. The thin film piezoelectric element of claim 6, wherein

said first principal electrode films of said first and second structures have projection portions exposed from said first and

second structures, respectively, adjacent the leading ends or rear edges of said first and second structures, respectively; and

said wiring connection parts are electrically connected to said protrusion portions of said first and second principal electrode films by conductor films formed on outer circumferences of said first and second structures, respectively.

8. An actuator comprising:

a holding substrate having a terminal electrode; and

a thin film piezoelectric element mounted to said holding substrate, said thin film piezoelectric element comprising first and second piezoelectric element units disposed mirror symmetrically with respect to a center line on said holding substrate and spaced apart at a specific interval;

wherein said first and second piezoelectric element units are arranged to be operable to expand and contract in mutually opposite directions via piezoelectric motion and cause an element mounted on said holding substrate to be moved in a direction generally perpendicular to said mutually opposite directions;

wherein said first piezoelectric element unit includes a first structure, and said second piezoelectric element unit includes a second structure;

wherein each of said first and second structures comprises a first piezoelectric thin film enclosed between a first

principal electrode film and a first counter electrode film, and a second piezoelectric thin film enclosed between a second principal electrode film and a second counter electrode film, said first counter electrode film and said second counter electrode film being bonded together so as to face each other via an adhesive layer;

wherein said first structure and said second structure are disposed on substantially a same plane;

wherein said first and second structures are generally separate from each other but are coupled together at a bonding-region, said first and second counter electrode films of said first structure being coupled to said first and second counter electrode films of said second structure, respectively, at said bonding-region;

wherein said first piezoelectric element unit includes a wiring connection part connecting said first principal electrode film of said first structure with said second principal electrode film of said first structure, and said second piezoelectric element unit includes a wiring connection part connecting said first principal electrode film of said second structure with said second principal electrode film of said second structure;

wherein said wiring connection parts of said first and second piezoelectric element units and said terminal electrode of said holding substrate are connected so as to conduct with each other.

9. A head support mechanism comprising:

a head for performing at least one of recording and reproducing;

a head slider on which said head is mounted; and

an actuator according to claim 8 mounted adjacent to said head slider and formed of a thin film piezoelectric element fixed on said holding substrate, wherein said holding substrate constitutes a flexure;

wherein said head slider is fitted to said flexure; and

wherein the element movable in a direction generally perpendicular to said mutually opposite directions is constituted by said head.

10. A disk recording and reproducing device comprising:

a disk;

a head slider;

a head mounted on said head slider;

an arm supporting said head slider; and

first and second positioning devices arranged for positioning said head slider at a predetermined track position of said disk;

wherein said first positioning device comprises a rotary driving unit for rotating said arm;

wherein said second positioning device comprises an actuator according to claim 8;

wherein said holding substrate comprises a flexure and said flexure is fixed to said arm; and

wherein the element that is caused, by the expansion and contraction of said first and second piezoelectric element units in mutually opposite directions, to be moved in the direction generally perpendicular to said mutually opposite directions is constituted by said head, such that operation of said actuator moves said head slightly to a predetermined track position of said disk.

11. The disk recording and reproducing device of claim 10, wherein

said disk comprises a hard disk for a magnetic recording and reproducing device; and

said head comprises a magnetic head.

12. A method of manufacturing a thin film piezoelectric element, comprising:

laminating a first principal electrode film, a first piezoelectric thin film and a first counter electrode film sequentially on a first substrate;

laminating a second principal electrode film, a second piezoelectric thin film and a second counter electrode film sequentially on a second substrate;

fixing the first counter electrode film and the second

counter electrode thin film to face each other via an adhesive layer;

removing only the second substrate;

processing the first principal electrode film, the first piezoelectric thin film, the first counter electrode film, the second counter electrode film, the second piezoelectric thin film, the second principal electrode film, and the adhesive layer into specified shapes for forming first and second structures that are mirror symmetrical with respect to a center line and are spaced apart by a specific interval in a region for allowing piezoelectric motion, and for forming a bonding-region of partially mutually integral structure of said first and second structures;

removing the second principal electrode film at the bonding-region;

coating said first and second structures with a resin layer, and bonding a temporary fixing substrate thereto via an adhesive;

removing only the first substrate so as to expose the first principal electrode film at the bonding-region;

removing the first principal electrode film at the bonding-region; and

separating the temporary fixing substrate by lowering adhesion of the adhesive used for bonding the temporary fixing substrate.

13. A method of manufacturing a thin film piezoelectric element, comprising:

forming a first principal electrode film having a slit of a specified width on a first substrate by using a specified mask, and laminating a first piezoelectric thin film and a first counter electrode film sequentially;

forming a second principal electrode film on a second substrate by using a mask of same shape as the mask used for forming the first principal electrode film, and laminating a second piezoelectric thin film and a second counter electrode film sequentially;

fixing the first counter electrode film and the second counter electrode film via an adhesive layer, so that the slit of the first principal electrode film and the slit of the second principal electrode film substantially coincide with each other;

removing only the second substrate;

processing the first principal electrode film, the first piezoelectric thin film, the first counter electrode film, the second counter electrode film, the second piezoelectric thin film, the second principal electrode film and the adhesive layer into specified shapes for forming first and second structures that are mirror symmetrical with respect to a center line of the slit in a region for allowing piezoelectric motion, so that a bonding-region of partially mutually integral structure of said first and second structures is positioned on an extension

line of said slit;

coating the pair of structures with a resin layer, and bonding a temporary fixing substrate thereto via an adhesive;

removing only the first substrate; and

separating the temporary fixing substrate by lowering adhesion of the adhesive used for bonding the temporary fixing substrate.

14. A method of manufacturing a thin film piezoelectric element, comprising:

forming, on a first substrate, a first principal electrode film having a slit of a specified width;

forming a first piezoelectric thin film on the first principal electrode film and in the slit;

forming a first counter electrode film on the first piezoelectric thin film so as to leave a specified region of the first piezoelectric thin film uncovered by the first counter electrode film, said specified region having a specified width and extending in a direction orthogonal to the slit;

forming, on a second substrate, a second principal electrode film having a slit of a same width as the slit of the first principal electrode film;

laminating a second piezoelectric thin film in a same shape as the first piezoelectric thin film and a second counter electrode film in a same shape as the first counter electrode

film;

fixing the first counter electrode film and the second counter electrode film via an adhesive layer, so that the slit of the first principal electrode film and the slit of the second principal electrode film substantially coincide with each other;

removing only the second substrate;

processing the first principal electrode film, the first piezoelectric thin film, the first counter electrode film, the second counter electrode film, the second piezoelectric thin film, the second principal electrode film and the adhesive layer on the first substrate for forming first and second structures that are mirror symmetrical with respect to a center line of said slits to allow for piezoelectric motion, so that a bonding-region of partially mutually integral structure of said first and second structures is positioned on an extension line of said slit, and forming protrusions exposed from said first and second the structures in part of each first principal electrode film of said first and second structures; and

forming wiring connection parts for connecting the protrusions of the first principal electrode with the second principal electrode of each of said first and second structures.

15. A method of manufacturing a thin film piezoelectric element, comprising:

forming a pair of first principal electrode films of

specified shapes that are mirror symmetrical with respect to a first slit extending in a first direction;

forming a substantially U-shaped first piezoelectric thin film on the pair of first principal electrode films and in part of said first slit, said first piezoelectric thin film having a smaller length in said first direction than the first principal electrode films so as to leave specified regions of the first principal electrode films uncovered by the first piezoelectric thin film, said specified regions being located at one end and extending in a second direction orthogonal to said first direction;

forming a first counter electrode film having a smaller length in said first direction than the first piezoelectric thin film so as to leave a region of said first piezoelectric thin film uncovered by said first counter electrode film only at the one end;

forming a pair of second principal electrode films that are mirror symmetrical with respect to a second slit extending in a third direction, said second principal electrode films having a smaller length in said third direction than the first principal electrode films have in said first direction, said second slit having a same width as said first slit;

forming a substantially U-shaped second piezoelectric thin film on the pair of second principal electrode films and in part of the second slit;

forming a second counter electrode film having a smaller length in said third direction than the second piezoelectric thin film only so as to leave a region of said second piezoelectric thin film uncovered by said second counter electrode film at the one end;

fixing the first counter electrode film to the second counter electrode film via an adhesive layer, so that the first slit of the first principal electrode film and the second slit of the second principal electrode film substantially coincide with each other;

removing the second substrate;

processing the adhesive layer on the first substrate by photolithography and etching for forming first and second structures that are mirror symmetrical with respect a center line of the first and second slits to allow for piezoelectric motion, so that a bonding-region of partially mutually integral structure of said first and second structures is positioned on an extension line of said slits, and for forming protrusions exposed from the first and second structures in part of the first principal electrode film of each of the first and second structures; and

forming wiring connection parts for connecting the protrusions of the first principal electrode with the second principal electrode for each of the first and second structures.